Decentralized Wastewater Solutions for a Historic Mill Village

New England is characterized by riverfront villages that grew up along every dam where water power could be harnessed. Many of these are now scenic historic centers but often these areas are also plagued with the less visible problems of chronic failing septic systems. Most construction predates modern septic system codes, and homes are clustered on small lots and along riverbanks. This presentation describes the unique approach Chepachet village, a typical Blackstone Valley mill village in Glocester RI, took to solve these problems. Small scale decentralized wastewater treatment systems were constructed to protect groundwater while maintaining infiltration.

In a two-part demonstration project, town officials worked with the University of Rhode Island Cooperative Extension to: 1) design, install and monitor advanced wastewater treatment systems to remediate failed systems on the most difficult sites within the village center; and 2) Conduct a GIS-based assessment of wastewater treatment needs. The goal of this study was to demonstrate use of alternative onsite wastewater technologies and GIS planning tools to support revitalization of historical village centers while preserving their unique natural and architectural features.

This presentation provides a brief overview of the Chepachet Village demonstration project, illustrates use of decentralized technologies in other historic villages, and summarizes resources available to support planning and management of decentralized wastewater treatment systems.

A summary of the Chepachet Village Decentralized Wastewater Demonstration Project is available in pdf format at http://www.uri.edu/ce/wq/mtp/html/publications.html .